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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,896	10/30/2001	Kazuo Nemoto	JP920000341US1	2332
877 75	590 09/29/2004		EXAMINER	
IBM CORPORATION, T.J. WATSON RESEARCH CENTER P.O. BOX 218 YORKTOWN HEIGHTS, NY 10598			CHAWAN, VIJAY B	
			ART UNIT	PAPER NUMBER
	,		2654	5
			DATE MAILED: 09/29/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	The Property No.	(Applicant(a)				
	Application No.	Applicant(s)				
,	09/682,896	NEMOTO, KAZUO				
Office Action Summary	Examiner	Art Unit				
	Vijay B. Chawan	2654				
The MAILING DATE of this communicati Period for Reply	on appears on the cover sheet	with the correspondence address				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica - If the period for reply specified above is less than thirty (30) day - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, be Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	FION. CFR 1.136(a). In no event, however, may stion. ys, a reply within the statutory minimum of y period will apply and will expire SIX (6) Moy statute, cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed or	າ					
2a) ☐ This action is FINAL . 2b) ☐	☑ This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-8 is/are pending in the application 4a) Of the above claim(s) is/are with 5) Claim(s) 13-18 is/are allowed. 6) Claim(s) 1-4 and 9-12 is/are rejected. 7) Claim(s) 5-8 is/are objected to. 8) Claim(s) are subject to restriction	rithdrawn from consideration.					
Application Papers						
9) The specification is objected to by the Ex 10) The drawing(s) filed on is/are: a)[Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by	accepted or b) objected to the drawing(s) be held in abey correction is required if the drawing	vance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
a) Acknowledgment is made of a claim for fa a) All b) Some * c) None of: 1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the application from the International * See the attached detailed Office action fo	numents have been received. numents have been received in ne priority documents have be Bureau (PCT Rule 17.2(a)).	n Application No en received in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-992) 3) Information Disclosure Statement(s) (PTO-1449 or PTO Paper No(s)/Mail Date 1/11/02.	948) Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application (PTO-152) 				

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DETAILED ACTION

Claim Objections

1. Claim 7, is objected to because of the following informalities: at line 6 of the claim should "whereat" be "wherein"?. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirano et al., (5,293,464).

As per claim 1, Hirano et al., teach an input apparatus comprising:

input means having multiple keys some of which are assigned to six dots for Braille (Col.3, lines 12-17);

key identification means for identifying said keys that are manipulated (Col.3, lines 12-20);

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Braille specification means for specifying Braille dot combinations based on the locations of said keys identified by said key identification means (Col.3, lines 12-20);

character conversion means for converting said specified Braille dot combinations into corresponding characters (Col.3, lines 41-48); and,

character data output means for outputting character data obtained by said character conversion means (Col3, lines 12-20, 41-48).

As per claim 2, Hirano et al., teach the input apparatus according to claim 1, further comprising:

speech synthesis means for generating speech synthesis data based on said character data produced by said character data output means (Col.3, lines 4-11, 22-24); and,

speech output means for outputting speech based on said speech synthesis data (Fig.1, item 1c).

4. Claims 3-4, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Osdin (GB 2332172A).

As per claim 9 and 3, Osdin teaches a portable communication terminal comprising: a key body having operating keys on a surface (Fig.1); and a display body, pivotally connected to said key body, having a display panel on a surface wherein said key body and said display body can be folded together so that said

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surface of said key body on which said operating keys are positioned and said surface of said display body on which said display panel is positioned are exposed (page 2, lines 9-19).

As per claim 10, Osdin teaches the portable communication terminal according to claim 9, further comprising:

a key protector for detecting manipulations of said operating keys (page 6, lines 9-23);

a processor for performing a process in accordance with said manipulations of said operating keys detected by said key detector (page 6, lines 9-23); and

a communication unit for outputting a signal to the outside based on the process performed by said processor, wherein said processor allocates six operating keys arranged in two columns and three rows, for dots used to specify a Braille dot combination that corresponds to said manipulations of said operating keys detected by said key detector, and outputs a signal representing a character corresponding to said specified Braille dot combination through said communication unit as said output signal (page 6, line 32- page 7, line 13).

As per claims 4 and 11, Osdin teaches the portable communication terminal according to claim 10, further comprising: a speech output unit for outputting speech, wherein said processor synthesizes speech based on characters obtained by conversion, and permits said speech output unit to release said speech (page 6, line 32- page 7, line 13).

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As per claim 12, Osdin teaches the portable communication terminal according to claim 11, wherein said processor allocates dots for said Braille keys in a column at one end and in a column at the other end (Fig.1).

Allowable Subject Matter

- 5. Claims 5-8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 13-18 are allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kramer et al., (5,047,952) teach a communication system for deaf, deaf-blind, or non-vocal individuals using instrumented glove.

McKiel Jr., (5,287,102) teaches a method and system for enabling a blind computer user to locate icons in a graphical user interface.

Corder (5,387,104) teaches an instructional system for improving communications skills.

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Fukumoto et al., (6,380,923) teaches full time wearable information managing device and method for the same.

Woolfson (4,694,494) teaches electronic memory devices for the blind.

Vanderheiden et al., (6,624,803) teach an interface for electronic devices providing improved access for people with disabilities.

Rao et al., (6,169,789) teach an intelligent keyboard.

Lenchik et al., (6,658,272) teach self configuring multiple element portable electronic device.

Waldman (5,311,175) teaches a method and apparatus for pre-identification of keys and switches.

Kanevsky et al., (6,665,642) teach transcoding system and method for improved access by users with special needs.

Brown et al., (6,546,431) teach data processing system and method for sharing user interface devices of a provider assistive technology application with disparate user assistive technology applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (703) 305-3836. The examiner can normally be reached on Monday Through Thursday 7-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vijay B. Chawan Primary Examiner Art Unit 2654

vbc 9/23/04

VIJAY CHAWAN
PRIMARY EXAMINER